

Appl. No. 10/774,325
Reply to Office Action of August 9, 2007

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IN THE CLAIMS

This listing of claims replaces all prior versions and listings of the claims in this application:

1. (Currently Amended) A method for producing protein-coated polystyrene microparticles consisting of the steps of:
 - (a) combining a suspension of uncoated polystyrene microparticles with a protein to form a combination, the protein being a partner of a bioaffinity binding pair and having a size from 10 nm to 300 nm as determined by photon correlation spectroscopy,
 - (b) coating the protein onto the microparticles by adsorption, wherein said coating step is conducted for a period of 1 to 10 days at a pH selected from a range of about 10.5 to about 12.5, and
 - (c) separating the non-adsorbed protein from the protein-coated microparticles.
2. (Previously Presented) The method of claim 1, wherein the protein is a polymerized protein.
3. (Previously Presented) The method of claim 1, wherein the protein is a streptavidin which has been polymerized by chemical treatment.
4. (Canceled)
5. (Original) The method of claim 1, wherein the microparticles have a magnetizable core.

Claims 6-8 (Canceled)

9. (Currently Amended) The method of claim 5 wherein the microparticles have a size of about 2.8 um and ~~econsists~~consist of about 88% polystyrene and about 12% magnetite.

10. (Canceled)

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11. (Previously Presented) The method of claim 1 wherein said coating step is conducted for a period of 4 to 7 days.

12. (Previously Presented) The method of claim 1 wherein the coating step is conducted at a pH between 11 and 12.

13. (Previously Presented) A method of producing protein-coated polystyrene microparticles, said method consisting of the steps of:

- (a) combining a suspension of polystyrene microparticles with a protein to form a combination, the protein being a partner of a bioaffinity binding pair and having a size from 10 nm to 300 nm as determined by photon correlation spectroscopy,
- (b) coating the protein onto the polystyrene microparticles by adsorption, wherein said coating step is conducted using a buffer having a salt content of 0.3 to 1.5 M and a pH selected from a range between 10.5 and 12.5, for a period of 1 to 10 days, and
- (c) separating the non-adsorbed protein from the protein-coated microparticles.

Claims 14-20. (Canceled)